8080 SYSTEM DESIGN KIT SDK-80

Complete single board microcomputer system including CPU, memory and I/O

Easy to assemble kit-form

High-performance (2 μs instruction cycle)

Interfaces directly with most terminals (75-4800 baud)

Large wire-wrap area for custom interfaces

Extensive system monitor software in ROM

PC board format and power, compatible with Intellec®MDS

The 8080 System Design Kit (SDK-80) is a complete, single board, microcomputer system in kit form. It contains all necessary components, including resistors, caps, crystal and miscellaneous hardware to complete construction. Included is a pre-programmed ROM that contains the system monitor for general software utilities and system diagnostics.

All that is required for operation are power supplies and a suitable terminal; TTY, CRT, etc., (level conversions and baud rate generation included on board).

The SDK-80 is an inexpensive, high-performance prototype system that has designed-in flexibility for simple interface to the users application.

DEVELOPMENT SYSTEMS

SPECIFICATIONS

CENTRAL PROCESSOR
CPU: 8080A
Instruction Cycle: 1.95 microsecond
Tcy: 488 ns

MEMORY
ROM: 2K bytes (expandable to 4K bytes) 8708/8308
RAM: 256 bytes (expandable to 1K bytes) 8111
Addressing: ROM 0000-0FFF
RAM 1000-13FF

INPUT/OUTPUT
Parallel: One 8255 for 24 lines (expandable to 48 lines).
Serial: One 8251 USART.
On-board baud rate generator (jumper selectable).
Baud Rates: 75, 110, 300, 600, 1200, 2400, 4800

INTERFACES
Bus: All signals TTL compatible.
Parallel I/O: All signals TTL compatible.
Serial I/O: RS232C/EIA
20 mA current loop TTY
TTL (one TTL load)

INTERRUPTS
Single level: Generates RST7 vector.
TTL compatible input.

DMA
Hold Request: Jumper selectable.

SOFTWARE
System Monitor: Pre-programmed 8708 or 8308 ROM
Addresses; 0000-03FF.
Features:

Display Memory Contents	(D)
Move blocks of memory	(M)
Substitute memory locations	(S)
Insert hex code	(I)
Examine Registers	(X)
Program Control	(G)
Break Point Capability	
Power-up start or system reset start.	

I/O: Console Device (serial I/O)

LITERATURE
Design Library:
8080 Users Manual
8080 Assembly Language Manual
PL/M Programming Manual
MDS Brochure
Reference Card (Programmers)
SDK-80 User's Guide

CONNECTORS
I/O: 25 pin female (RS232C)
PCB: MDS format

PHYSICAL CHARACTERISTICS (MDS MECHANICAL FORMAT)
Width: 12.0 in.
Height: 6.75 in.
Depth: 0.50 in.
Weight: approx. 12 oz.

ELECTRICAL CHARACTERISTICS (DC POWER)

V_{CC} 5V ±5%	1.3 Amps
V_{DD} 12V ±5%	0.35 Amps
V_{BB} −10V ±5%	0.20 Amps
or −12V ±5%	